

Amendments to the Specification

Please replace paragraphs [0025], [0027], and [0030] with the following paragraphs set forth below:

[0025] A difference amplifier 14 is located behind the two input stages 11 and 12. This means that the output of input stage 11 is applied to the non-inverting input of the difference amplifier 14, while the output of the second input stage 12 is applied to the inverting input of the difference amplifier 14. The difference signal generated from the input signals is present at the output of the difference amplifier ~~[[13]]~~ 14.

[0027] The nonlinear curves of input stages 11 and 12, and diodes 15, 16, respectively, are selected in such a way such that, of the negative and positive half waves of the audio signal, one half wave is processed nonlinearly and the other half wave is processed linearly, or at least nearly so. Thus, in the circuit shown in FIG. 2, the positive half wave of the audio signal that is present at the input of the first input stage 11 is processed nonlinearly, while the corresponding negative half wave is processed linearly. Signal processing in the second input stage 12 occurs in the same manner. The audio signals processed in this way in input stages 11 and 12 are then subtracted in the downstream difference amplifier 14, with the result that a single audio signal is supplied with a compression that is essentially limited to the signal peaks--i.e., to the maximum of the positive half wave and to the minimum of the negative half wave of the audio signal, as will be described in greater detail below based on ~~FIGS. 306~~ FIGS. 3-6.

[0030] Fig. 5 shows the output signal from difference amplifier 14, at whose two inputs signals A and B from Fig. 4 are applied. The resulting difference signal is identified in Fig. 5 by the letter C, and for comparison purposes, the non-processed audio signal is identified by letter D, which is supplied at the difference amplifier 14 by bypassing input stages 11 and 12. If one compares the curves of signals C and ~~[[B]]~~ D, it becomes apparent that the audio signal that is partially processed in a nonlinear manner in input stages ~~[[17]]~~ 11 and ~~[[18]]~~ 12 is compressed in its peak range at the output of difference amplifier 14. This

means that the original sinusoidal curve is changed into a flattened sinusoidal curve through the processing that occurs in input stages 11 and 12. The difference between signals C and D in the range of their maxima and minima corresponds to an amplitude difference x , which represents the increase in headroom resulting from the processed signal C compared to the unprocessed signal D.